



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/721,507

11/26/2003

Masaki Oguro

1349.1254

6120

21171 7590 06/19/2009
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

BEMBEN, RICHARD M

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

06/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/721,507	Applicant(s) OGURO, MASAKI	
	Examiner RICHARD M. BEMBEN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42,45-57 and 59 is/are pending in the application.
- 4a) Of the above claim(s) 14-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13,23-42,45-57 and 59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2 April 2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-13, 23-42, 45-57 and 59 have been considered but are moot in view of the new ground(s) of rejection.

3. Regarding the Official Notice taken in claims 2, 23 and 40 in the previous final Office Action, dated 2 February 2009: "To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art [...]. If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate." See MPEP § 2144.03 [R-1]. Therefore, since the applicant did not specifically point out the

Art Unit: 2622

supposed errors in the examiner's action the (Official Notice) common knowledge or well-known in the art statement is taken to be admitted prior art.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claim 59** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 59 requires, *inter alia*, a single chip controller wherein the single chip controller comprises an encoder to convert a data signal into a video signal according to either the NTSC (National television system committee) scheme or the PAL (Phase alternation line) scheme for an external device via an output terminal. However, Applicant's specification does not disclose a single chip controller comprising said encoder. Applicant's specification at ¶ [0039], [0041] and [0048] discloses that "control unit 200" (as seen in Figures 8 & 9) is the single chip controller. Referring to ¶ [0041]: "For compactness, typically, the control unit 200 is formed as a single chip" and ¶ [0048]: "Typically, the control unit is a single chip". Referring to ¶ [0039], "Fig. 9 is a detailed functional block diagram of the control unit 200 of Fig. 8". As seen in Figure 9,

Art Unit: 2622

control unit 200 does not comprise a signal encoder for converting a data signal into a video signal according to either the NTSC (National television system committee) scheme or the PAL (Phase alternation line) scheme for an external device via an output terminal. Rather, as seen in Figure 8, "NT/PAL encoder 110" (described in ¶ [0033]) is located outside the single chip controller (i.e. control unit 200). Therefore, claim 59 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 24, 40 and 41 are objected to because they recite the limitation "the receiving area of the first housing". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3-6 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,046,276 issued to Hashimoto et al., hereinafter "Hashimoto", in view of US Pub. No. 2001/0033333 filed by Suzuki et al.,**

Art Unit: 2622

hereinafter "Suzuki" in further view of US Pub. No. 2002/0186315 filed by Yoshida et al., hereinafter "Yoshida".

Regarding **claim 1**, Hashimoto discloses a video/audio data recording/reproducing apparatus, comprising:

a camera unit (*refer to c. 6, ll. 41-59*);

a single chip controller (*refer to c. 8, l. 47 - c. 9, l. 16, "CPU"*) controlling processing by at **least two various** function units as a digital camcorder (*video capture, refer to c. 3, ll. 57, c. 6, ll. 60-67, c. 7, ll. 20-23*), a digital still camera (*still image capture, refer to c. 6, ll. 60-67, c. 7, ll. 20-23*), a video recorder/reproducer (*refer to c. 3, ll. 61-64, "record mode or play mode"*), a data storage (*refer to c. 7, ll. 32-34*), an MP3 player and a voice recorder (*audio capture, refer to c. 3, l. 56, c. 6, ll. 16-38, c. 7, ll. 20-21*); and

a memory device (memory card) as a main data recording medium storing data of the various function units (*refer to c. 7, ll. 32-34 & Figure 8, "16"*). Hashimoto further discloses a TV signal encoder to convert a data signal into a video signal according to either the NTSC (National television system committee) scheme or the PAL (Phase alternation line) scheme for an external device via an output terminal (*refer to c. 6, ll. 60-67 and c. 7, ll. 32-41*), a MPEG decoder to decode MPEG video data (*refer to c. 6, ll. 60-67*), an audio interface to produce MP3 audio data (*refer to c. 6, ll. 16-38*), a Universal Serial Bus (USB) interface to transceive data (*refer to c. 9, ll. 12-16*), and a storage medium to store data (*refer to c. 6, ll. 16-38, "DRAM"*).

However, Hashimoto does not disclose that the memory device is a micro-compact hard disc drive.

Suzuki discloses a video/audio data recording/reproducing apparatus (electronic camera) capable of obtaining moving image data and still image data (refer to [0003]) comprising a memory (*refer to [0136] & Figure 2, "Storage Medium 195"*). Suzuki discloses that there are numerous varieties of memory devices that are acceptable, including a memory card or a hard disc (*refer to [0136]*). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a hard disc as a memory device as disclosed by Suzuki in the video/audio data recording/reproducing apparatus disclosed by Hashimoto because (1) Suzuki demonstrates that memory cards and hard discs can accomplish the same tasks in electronic cameras and (2) hard discs are notoriously well-known memory devices.

However, Hashimoto discloses a camera housing (*refer to Figures 1A-B*). However, Hashimoto does not disclose a first housing; a second housing in a parallel relation facing the receiving area of the first housing; and a middle housing having one or more operational manipulators to control the single chip controller and supported in between the first and second housings, and wherein the first and second housings each comprises an integral concave casing area covering the camera unit supported by the middle housing and positioned on a top portion of the first and second body housings.

Yoshida discloses a camera housing (*refer to [0024]-[0034] and Figures 6 and 7*) comprising a first housing (*Figure 6, "11"*); a second housing in a parallel relation facing the receiving area of the first housing (*Figure 6, "12"*); and a middle housing having one or more operational manipulators to control the single chip controller and supported in between the first and second housings (*[0027] and Figure 6, "61", "62", "67"*), and

Art Unit: 2622

wherein the first and second housings each comprises an integral concave casing area covering the camera unit supported by the middle housing and positioned on a top portion of the first and second body housings (*Figure 6, "11", "12" and Figure 7*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the camera housing disclosed by Yoshida in the video/audio data recording/reproducing apparatus disclosed by Hashimoto in view of Suzuki (1) because it is a simple matter of design choice and/or (2) the housing disclosed by Yoshida allows easy rotation of the camera unit, which in turn provides a user with more photographing options and photographing flexibility (*see Yoshida, [0001]-[0011]*).

Regarding **claim 3**, refer to the rejection of claim 1 and Hashimoto further discloses a mode shifting switch selecting the function units (*refer to c. 3, ll. 55-58*).

Regarding **claim 4**, refer to the rejection of claim 1 and Hashimoto further discloses a transient integrated circuit interfacing the memory device with the controller (*refer to c. 7, ll. 2-12 and Figure 8, "interface circuit 14"*).

Regarding **claim 5**, refer to the rejection of claim 1 and Hashimoto further discloses a body including the single chip controller and the memory device (*refer to Figures 1A-B*); and

a station communicatively receiving the body and providing one or more transmission/reception terminals allowing data transmission/reception between the body and external computing devices (*refer to c. 4, ll. 48-67 and Figures 2A-C, interfaces "188" and "184"*).

Regarding **claim 6**, refer to the rejection of claim 5 and Hashimoto further discloses that the station and the body are communicatively connected via a connection terminal in the station and the body, respectively (*refer to c. 4, ll. 11-67 and Figures 1A-B, "electrical contacts 158" on the camera and Figures 2A-C, "pins 192" on the station*).

Regarding **claim 24**, refer to the rejection of claim 1 and Hashimoto further discloses a video/audio data recorder/reproducer (Figure 1).

Regarding **claim 25**, refer to the rejection of 24 and Suzuki further discloses a video/audio data recording/reproducing apparatus (electronic camera) capable of obtaining moving image data and still image data (refer to [0003]) comprising a memory (*refer to [0136] & Figure 2, "Storage Medium 195"*). Suzuki discloses that there are numerous varieties of memory devices that are acceptable, including a memory card or a hard disc (*refer to [0136]*).

Regarding **claim 26**, refer to the rejection of claim 24 and Hashimoto further discloses a station communicatively support the video/audio data recorder/reproducer

Art Unit: 2622

and to provide one or more transmission/reception terminals allowing data transmission/reception between the video/audio data recorder/reproducer and an external device via the station (*c. 4, ll. 44-61 and Figures 2A-C*).

10. Claims 2 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Suzuki in further view of Yoshida and Applicant's Admitted Prior Art (AAPA).

Regarding **claim 2**, refer to the rejection of claim 1 and Hashimoto further discloses a system bus (*refer to c. 9, ll. 12-16*);

a multiplexer/system resource controller in communication with the system bus and outputting image signals (*refer to c. 9, ll. 12-16*);

a motion picture experts group compressor/decompressor in communication with the system bus and compressing/decompressing data of the function units (*refer to c. 6, ll. 60-67*);

a data recording medium interface in communication with the system bus and reading/writing data from/to a memory unit and the micro-compact hard disc drive (*refer to c. 7, ll. 2-12*);

a serial bus interface in communication with the system bus and receiving/transmitting the data of the function units (*refer to c. 9, ll. 12-16*);

a video processor in communication with the system bus and processing image signals input through the digital camcorder and still camera function units or input through an input terminal (*refer to c. 6, ll. 60-67 and c. 7, ll. 32-41*);

Art Unit: 2622

an audio encoder/decoder in communication with the system bus and processing input/output audio signals for the MP3 player and the voice recorder (*refer to c. 6, ll. 16-38*); and

a central processing unit controlling the controller via the system bus (*refer to c. 8, l. 47 – c. 9, l. 16*).

However, Hashimoto does not explicitly disclose that the serial interface is a USB interface or that the MPEG compressor/decompressor is MPEG-4.

However, Hashimoto does not disclose that the serial terminal is a USB terminal.

While Hashimoto does not explicitly disclose that the interface is a USB interface, AAPA discloses that a USB interface is a notoriously well-known serial interface in the art of digital cameras. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a USB interface as disclosed by AAPA for the interface disclosed by Hashimoto because USB is a widely accepted and used interface standard.

Similarly, while Hashimoto does not explicitly disclose that the MPEG compressor/decompressor is MPEG-4, AAPA discloses that MPEG compressor/decompressor is MPEG-4 is a notoriously well-known format in the art of digital cameras. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use MPEG-4 as is disclosed by AAPA for the interface disclosed by Hashimoto because MPEG-4 is a widely accepted and used interface standard.

Regarding **claim 23**, refer to the rejection of claim 5 and Hashimoto further discloses that the at least one transmission/reception terminal provided on the station is a serial bus (RS-232) terminal.

However, Hashimoto does not disclose that the serial terminal is a USB terminal.

While Hashimoto does not explicitly disclose that the interface is a USB interface, AAPA discloses that a USB interface is a notoriously well-known serial interface in the art of digital cameras. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a USB interface as disclosed by AAPA for the interface disclosed by Hashimoto because USB is a widely accepted and used interface standard.

11. Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Suzuki in further view of Yoshida and Bianchi.

Regarding **claim 7**, Hashimoto in view of Suzuki in further view of Yoshida discloses the video/audio data recording/reproducing apparatus required by claim 1. Hashimoto further discloses a (docking) station that communicatively receives the video/audio data recording/reproducing apparatus (refer to the rejection of claim 5). However, Hashimoto in view of Suzuki in further view of Yoshida does not disclose that the station comprises one or more manipulation buttons controlling the function units while the body is seated on the station.

Bianchi discloses a video/audio data recorder/reproducer [camera] (*refer to [0024], [0026]-[0032], [0041]-[0045], [0049]-[0052] and Figure 1, "digital still camera 18"*)

Art Unit: 2622

communicatively coupled to a docking station (*refer to [0028] and Figure 1, "docking station 14"*) wherein the docking station comprises one or more manipulation buttons controlling the function units while the body is seated on the station (*refer to [0040], [0044], [0057] and Figure 1: docking station comprises a remote control*). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to allow manipulation of buttons to control the function units of the camera (i.e. the video/audio data recorder/reproducer) as disclosed by Bianchi in the station disclosed by Hashimoto in view of Suzuki in further view of Yoshida in order to access the functions of the camera (*Bianchi, [0057]*), e.g. review pictures in picture review mode (*Bianchi, [0026]*).

Regarding **claim 8**, refer to the rejection of claim 5 and Bianchi further discloses that the camera (body) comprises a battery (*refer to [0034], [0041]-[0043] and Figure 2, "batteries 271"*) and the station recharges the batter from an external power supply while the body is seated on the station (*refer to [0040], [0043] and Figure 2*).

Regarding **claim 9**, refer to the rejection of claim 5 and Bianchi further discloses that the station comprises a USB, an SVHS, an AV, or a video line input, or any combinations thereof, as the transmission/reception terminals (*refer to [0033] and Figure 1, "A/V port" and "A/V cable"*).

Regarding **claim 10**, refer to the rejection of claim 5 and Bianchi further discloses that the station comprises a signal reception unit receiving operations signals from a remote controller to control the function units while the body is seated on the station (*refer to [0040], [0044], [0057] and Figure 1, "IR receiver 44" and "IR remote control 46"*).

Regarding **claim 11**, refer to the rejection of claim 5 and Hashimoto further discloses a removable storage wherein the body further comprises a window to check the removable storage connection (*refer to c. 4, ll. 19-21 and Figure 1B, "slot 160"*).

Regarding **claim 12**, refer to the rejection of claim 1 and Hashimoto further discloses a video line input, wherein the controller receives image signals from the video line input, digitizes and compresses the image signals and stores the image signals in the memory device, thereby providing a video recorder as one of the various function units (*refer to c. 6, l. 39 - c. 7, l. 49*).

Regarding **claim 13**, refer to the rejection of claim 12 and Hashimoto further discloses a display unit displaying an image, wherein the controller reads the image signals from the memory device, decompresses the read image signals and outputs the decompressed image signals to the display unit for displaying, thereby providing a video reproducer as another function unit (*refer to c. 6, l. 39 - c. 7, l. 49*).

12. Claims 26-32 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Suzuki in further view of Yoshida and US Pub. No. 20030117499 filed by Bianchi et al., hereinafter "Bianchi".

In the event that the Applicant disagrees with the previous claim 26 rejection:

Regarding **claim 26**, Hashimoto in view of Suzuki in further view of Yoshida disclose the limitations required by claim 24 (refer to the rejection of claim 24). Hashimoto further discloses a station/dock (Figures 2A-C). However, Hashimoto in view of Suzuki in further view of Yoshida does not disclose a station communicatively support the video/audio data recorder/reproducer and to provide one or more transmission/reception terminals allowing data transmission/reception between the video/audio data recorder/reproducer and an external device via the station.

Bianchi discloses a station (*refer to [0028] and Figure 1, "docking station 14"*) to communicatively support the video/audio data recorder/reproducer and to provide one or more transmission/reception terminals (*refer to [0033], "A/V port"*) allowing data transmission/reception between the video/audio data recorder/reproducer and an external device via the station (*refer to [0033] and Figure 1*). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have a station communicatively support the video/audio data recorder/reproducer as disclosed by Bianchi in the apparatus disclosed by Hashimoto in view of Suzuki in further view of Yoshida in order to communicate with an external device, such as a personal computer (*Hashimoto, c. 4, ll. 53-56*).

Regarding **claim 27**, refer to the rejection of claim 26 and Bianchi further discloses that the station and the video/audio data recorder/reproducer communicatively connect via a connection terminal in the station and the video/audio data recorder/reproducer, respectively (*refer to [0026] and Figure 1, "electrical contracts 24" and "mating electrical contacts 28"*).

Regarding **claim 28**, refer to the rejection of claim 26 and Bianchi further discloses that the station comprises one or more function manipulators controlling the function units while the video/audio data recorder/reproducer sits on the station (*refer to [0040], [0044], [0057] and Figure 1: docking station comprises a remote control*).

Regarding **claim 29**, refer to the rejection of claim 26 and Bianchi further discloses that the video/audio data recorder/reproducer further comprises a battery (*refer to [0034], [0041]-[0043] and Figure 2, "batteries 271"*), and

the station further comprises a charger to charge the battery from an external power supply while the video/audio data recorder/reproducer sits on the station (*refer to [0040], [0043] and Figure 2*).

Regarding **claim 30**, refer to the rejection of claim 26 and Bianchi further discloses a battery receiving area to receive a battery (*refer to [0026] and Figure 1, "electrical contracts 24" receive camera 18 which has "batteries 271", [0034], [0041]-[0043] and Figure 2*); and

Art Unit: 2622

a charger to charge the battery from an external power supply while the battery is in the receiving area of the station (*refer to [0040], [0043] and Figure 2*).

Regarding **claim 31**, refer to the rejection of claim 26 and Bianchi further discloses that the station comprises a Universal Serial Bus, an SVHS, an AV, or a video line input, or any combinations thereof, as the one or more transmission/reception terminals (*refer to [0033] and Figure 1, "A/V port" and "A/V cable"*).

Regarding **claim 32**, refer to the rejection of claim 26 and Bianchi further discloses wherein the video/audio data recorder/reproducer further comprises: a camera unit; and a battery compartment positioned perpendicularly to the camera unit (*refer to Figure 2 and without a reference plane, any part of the battery compartment could be either in parallel or perpendicular with the camera unit*).

Regarding **claim 35**, refer to the rejection of claim 26 and Bianchi further discloses that the video/audio data recorder/reproducer further comprises:

a display unit (*refer to [0032]*); and

one or more transceiver terminals to communicably connect with an external device (*refer to [0026] and Figure 1, "mating electrical contacts 28" to connect to docking station 14; also refer to [0034], digital camera can include a computer port, e.g. USB*),

Art Unit: 2622

wherein the station communicatively supports the video/audio data recorder/reproducer to expose the display unit and the one or more transceiver terminals (*refer to [0026] and Figure 1: when the camera is docked it is in picture review mode; also refer to [0056]*).

Regarding **claim 36**, refer to the rejection of claim 26 and Bianchi further discloses that the video/audio data recorder/reproducer further comprises one or more function manipulators (*refer to [0027]-[0032]*), and

wherein the station comprises one or more function manipulators corresponding to the recorder/reproducer function manipulators while the video/audio data recorder/reproducer sits on the station (*refer to [0040], [0044], [0057] and Figure 1: docking station comprises a remote control*).

Regarding **claim 37**, refer to the rejection of claim 35 and Bianchi further discloses display unit comprises one or more function manipulators (*refer to [0032]*) and the display unit is rotatable to be exposed, including the function manipulators, while the video/audio data recorder/reproducer sits on the station (*when docked, the station and camera may be rotated together, therefore the display may be rotated, to be exposed... claim does not require display to rotate away from a "body"*).

Regarding **claim 38**, refer to the rejections of claims 36 and 37 and Bianchi further discloses that the station further comprises a sloped receiving area to angle the

Art Unit: 2622

supported video/audio data recorder/reproducer to enable easy viewing and manipulation of the display unit of the video/audio data recorder/reproducer (*refer to Figure 1*).

Regarding **claim 39**, refer to the rejection of claim 25 and Bianchi further discloses a display (*refer to [0032] and Figure 1*) and a battery (*refer to [0035] and Figure 2*), wherein the display, the storage medium and the battery are all in a parallel relation to each other (*without further description of a reference plane or orientation, it can be said that some part of the display, storage medium and battery are all in parallel on some plane*). It would have been obvious to one of ordinary skill in the art at the time of the invention to have a battery, display and storage medium in a parallel relation as disclosed by Bianchi in any of the apparatus' disclosed by Hashimoto, Suzuki and Hattori as these components have become standard in the art of photography.

13. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Suzuki in further view of Yoshida, Bianchi and US Patent No. 7,317,475 issued to Arai et al., hereinafter "Arai".

Regarding **claim 33**, Hashimoto in view of Suzuki in further view of Yoshida and Bianchi discloses the required limitations of claim 33. Bianchi further discloses a zoom function (*refer to [0028]*). However, Hashimoto in view of Suzuki in further view of Yoshida and Bianchi does not disclose that the zoom controller is manipulated by sliding a circular-arc.

Art Unit: 2622

Arai discloses a camera with a zoom function wherein the zoom controller is manipulated by sliding a circular-arc (refer to Figure 18). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to control zoom by manipulating a circular-arc as disclosed by Arai in the system disclosed by Hashimoto in view of Suzuki in further view of Yoshida and Bianchi because rotational "dial" type switches are common as manipulating devices in electronic devices.

Regarding **claim 34**, refer to the rejection of claim 33 and Bianchi discloses that the camera zoom button is positioned parallel or perpendicular to the camera unit because parallel or perpendicular is describing all possible orientations.

14. Claims 40-42, 47-49, 52 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of AAPA in further view of Yoshida.

Regarding **claim 40**, Hashimoto discloses an apparatus comprising:

a camera unit (*refer to c. 6, ll. 41-59*);

a programmable single chip controller (*refer to c. 8, l. 47 - c. 9, l. 16, "CPU"*) to control processing by various function units as a digital camcorder (*video capture, refer to c. 3, ll. 57, c. 6, ll. 60-67, c. 7, ll. 20-23*), a digital still camera (*still image capture, refer to c. 6, ll. 60-67, c. 7, ll. 20-23*), a video recorder/reproducer (*refer to c. 3, ll. 61-64, "record mode or play mode"*), a data storage (*refer to c. 7, ll. 32-34*), an MP3 player, or voice recorder (*audio, refer to c. 3, l. 56, c. 6, ll. 16-38, c. 7, ll. 20-21*), or any combinations thereof; and

Art Unit: 2622

a station (*refer to c. 4, ll. 48-67 and Figures 2A-C*) to communicatively support the programmable controller and comprising:

one or more transmission/reception terminals to enable data transmission/reception between the programmable controller and an external device through the station (*refer to c. 4, ll. 48-61*).

wherein at least one of the transmission/reception terminals is a serial (RS-232) terminal.

However, Hashimoto does not disclose that the serial terminal is a USB terminal.

While Hashimoto does not explicitly disclose that the interface is a USB interface, AAPA discloses that a USB interface is a notoriously well-known serial interface in the art of digital cameras. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a USB interface as disclosed by AAPA for the interface disclosed by Hashimoto because USB is a widely accepted and used interface standard.

However, Hashimoto discloses a camera housing (*refer to Figures 1A-B*).

However, Hashimoto does not disclose a first housing; a second housing in a parallel relation facing the receiving area of the first housing; and a middle housing having one or more operational manipulators to control the single chip controller and supported in between the first and second housings, and wherein the first and second housings each comprises an integral concave casing area covering the camera unit supported by the middle housing and positioned on a top portion of the first and second body housings.

Art Unit: 2622

Yoshida discloses a camera housing (*refer to [0024]-[0034] and Figures 6 and 7*) comprising a first housing (*Figure 6, "11"*); a second housing in a parallel relation facing the receiving area of the first housing (*Figure 6, "12"*); and a middle housing having one or more operational manipulators to control the single chip controller and supported in between the first and second housings (*[0027] and Figure 6, "61", "62", "67"*), and wherein the first and second housings each comprises an integral concave casing area covering the camera unit supported by the middle housing and positioned on a top portion of the first and second body housings (*Figure 6, "11", "12" and Figure 7*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the camera housing disclosed by Yoshida in the video/audio data recording/reproducing apparatus disclosed by Hashimoto in view of Suzuki (1) because it is a simple matter of design choice and/or (2) the housing disclosed by Yoshida allows easy rotation of the camera unit, which in turn provides a user with more photographing options and photographing flexibility (*see Yoshida, [0001]-[0011]*).

Regarding **claim 41**, refer to the rejection of claim 40.

Regarding **claim 42**, refer to the rejection of claim 41 and Hashimoto further discloses that the audio reproducer reproduces MP3 audio data (*"MPEG-2 audio" as well as other formats; refer to c. 6, ll. 26-29*), the video reproducer reproduces MPEG

Art Unit: 2622

video data and the still image reproducer reproduces JPEG image data (*as well as other formats; refer to c. 6, ll. 60-67*).

Regarding **claim 47**, refer to the rejection of claim 43 and Hashimoto further discloses a station to communicatively support the controller to provide one or more transmission/reception terminals allowing data transmission/reception between the controller and an external device via the station (*refer to c. 4, ll. 48-67 and Figures 2A-C, interfaces "188" and "184"*).

Regarding **claim 48**, refer to the rejection of claim 43 and Hashimoto further discloses that the controller further comprises one or more function manipulators and the station comprises one or more function manipulators corresponding to the controller function manipulators while the controller sits on the station (*refer to c. 4, ll. 11-67 and Figures 1A-B, "electrical contacts 158" on the camera and Figures 2A-C, "pins 192" on the station*).

Regarding **claim 49**, refer to the rejection of claim 47 and Hashimoto further discloses that the station comprises one or more function manipulators controlling the function units while the controller sits on the station (*Figures 2A-C, "pins 192" on the station*).

Regarding **claim 52**, refer to the rejection of claim 47 and Hashimoto further discloses that the station further comprises a Universal Serial Bus, an SVHS, an AV, or a video line input, or any combinations thereof, as the one or more transmission/reception terminals (*refer to c. 4, ll. 48-61*).

Regarding **claim 57**, refer to the rejection of claim 43 and Hashimoto further discloses that the storage medium is a flash memory (*refer to c. 7, ll. 9 and Figure 8, "16"*).

15. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of AAPA in further view of Yoshida and Suzuki.

Regarding **claim 45**, Hashimoto in view of AAPA in view of Yoshida discloses that required limitations of claim 41. Hashimoto further discloses that the controller is implemented on a circuit board (inherent that the CPU chip is put on some sort of circuit board). Hashimoto further discloses that the first housing comprises a receiving area to face inside the apparatus and to accommodate the memory (*refer to Figure 1, slot 160*). However, Hashimoto in view of AAPA in view of Yoshida does not disclose that the memory device is a micro-compact hard disc drive.

Suzuki discloses a video/audio data recording/reproducing apparatus (electronic camera) capable of obtaining moving image data and still image data (*refer to [0003]*) comprising a memory (*refer to [0136] & Figure 2, "Storage Medium 195"*). Suzuki discloses that there are numerous varieties of memory devices that are acceptable,

Art Unit: 2622

including a memory card or a hard disc (*refer to [0136]*). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a hard disc as a memory device as disclosed by Suzuki in the video/audio data recording/reproducing apparatus disclosed by Hashimoto in view of AAPA in view of Yoshida because (1) Suzuki demonstrates that memory cards and hard discs can accomplish the same tasks in electronic cameras and (2) hard discs are notoriously well-known memory devices.

Regarding **claim 46**, refer to the rejection of claim 45 and Hashimoto further discloses a liquid crystal display (LCD) monitor provided on the first housing and facing away from the receiving area and positioned in a parallel plane to the micro-compact hard disk drive (*refer to c. 3, ll. 58-61 and Figures 1A-B*).

16. Claims 50, 51 and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of AAPA in further view of Yoshida and Bianchi.

Regarding **claim 50**, Hashimoto in view of AAPA in further view of Yoshida discloses the controller and station required by claim 47. However, Hashimoto in view of AAPA in Further view of Yoshida does not disclose a battery, wherein the station further comprises a charger to charge the battery from an external power supply while the controller sits on the station.

Bianchi discloses a "controller" or digital camera (*refer to [0024], [0026]-[0032], [0041]-[0045], [0049]-[0052] and Figure 1, "digital still camera 18"*) communicatively coupled to a docking station (*refer to [0028] and Figure 1, "docking station 14"*), the digital camera comprising transceiver terminals (*refer to [0034]*). Bianchi further discloses a battery, wherein the station further comprises a charger to charge the battery from an external power supply while the controller sits on the station (*refer to [0034], [0041]-[0043] and Figure 2, "batteries 271"; refer to [0040], [0043] and Figure 2 for charging*). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to charge the camera's batteries while docked as disclosed by Bianchi in the system disclosed by Hashimoto in view of AAPA in further view of Yoshida in order to provide power to the camera.

Regarding **claim 51**, Hashimoto in view of AAPA in further view of Yoshida discloses the controller and station required by claim 47. However, Hashimoto in view of AAPA in Further view of Yoshida does not disclose a battery receiving area to receive the battery; and a charger to charge the battery from an external power supply while the battery is in the receiving area of the station.

Bianchi discloses a "controller" or digital camera (*refer to [0024], [0026]-[0032], [0041]-[0045], [0049]-[0052] and Figure 1, "digital still camera 18"*) communicatively coupled to a docking station (*refer to [0028] and Figure 1, "docking station 14"*), the digital camera comprising transceiver terminals (*refer to [0034]*). Bianchi further discloses a battery receiving area to receive the battery (*refer to [0026] and Figure 1,*

Art Unit: 2622

“electrical contracts 24” receive camera 18 which has “batteries 271”, [0034], [0041]-[0043] and Figure 2) and a charger to charge the battery from an external power supply while the battery is in the receiving area of the station (*refer to [0040], [0043] and Figure 2*). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to charge the camera’s batteries while docked as disclosed by Bianchi in the system disclosed by Hashimoto in view of AAPA in further view of Yoshida in order to provide power to the camera.

Regarding **claim 53**, Hashimoto in view of AAPA in further view of Yoshida discloses the controller and station required by claim 47. Hashimoto further discloses that the controller further comprises one or more transceiver terminals (*refer to c. 4, ll. 44-47*). However, Hashimoto in view of AAPA in further view of Yoshida does not disclose a display (integrated with the controller) and that the station communicatively supports the controller to expose the display including the one or more transceiver terminals.

Bianchi discloses a “controller” or digital camera (*refer to [0024], [0026]-[0032], [0041]-[0045], [0049]-[0052] and Figure 1, “digital still camera 18”*) communicatively coupled to a docking station (*refer to [0028] and Figure 1, “docking station 14”*), the digital camera comprising transceiver terminals (*refer to [0034]*). Bianchi further discloses a display (*refer to [0032]*) wherein the station communicatively supports the controller to expose the display including the one or more transceiver terminals (*refer to [0026], “picture review mode” and Figure 1*). Therefore, it would have been obvious to a

Art Unit: 2622

person having ordinary skill in the art at the time the invention was made to have a display that is exposed when the "controller" or camera is docked as disclosed by Bianchi in the system disclosed by Hashimoto in view of AAPA in further view of Yoshida in order to review pictures while the camera is docked via the camera's display.

Regarding **claim 54**, refer to the rejection of claim 53 and Bianchi further discloses that the display comprises one or more function manipulators (*refer to [0032]*) and the display is rotatable to be exposed, including the function manipulators, while the controller sits on the station (*when docked, the station and camera may be rotated together, therefore the display may be rotated, to be exposed... claim does not require display to rotate away from a "body"*).

Regarding **claim 55**, refer to the rejections of claims 47 and 53 and Bianchi further discloses that the station further comprises a sloped receiving area to angle the supported controller to enable easy viewing and manipulation of the display of the controller (*refer to Figure 1*).

Regarding **claim 56**, refer to the rejection of claim 43 and Bianchi further discloses a display (*refer to [0032] and Figure 1*) and a battery (*refer to [0035] and Figure 2*), wherein the display, the storage medium and the battery are all in a parallel relation to each other (*without further description of a reference plane or orientation, it*

Art Unit: 2622

can be said that some part of the display, storage medium and battery are all in parallel on some plane).

17. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Suzuki in further view of Yoshida and US Pub. No. 2005/0012826 filed by Hattori et al., hereinafter "Hattori".

Regarding **claim 59**, Hashimoto in view of Suzuki in further view of Yoshida discloses the limitations required by claim 1. Hashimoto discloses that the CPU can be a single chip (*c. 8, ll. 65-66*). However, Hashimoto in view of Suzuki in further view of Yoshida does not disclose that the TV endoder, MPEG decoder, audio interface, USB and storage medium are located on a single chip controller.

Hattori discloses a single chip video camera comprising various signal processing components and an NTSC encoder (*[0135], [0143], and Figure 15, "NTSC Encoder 302"*). It would have been obvious to one having ordinary skill in that art at the time of the invention to place various signal processing components on a single chip as disclosed by Hattori in the apparatus disclosed by Hashimoto in view of Suzuki in further view of Yoshida in order to reduce the size and complexity of the apparatus.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art disclose camera housing relevant to applicant's invention:

US D463,469 issued to Kawase;
US D394,075 issued to Ninomiya et al.;
US D407,097 issued to Suzuki et al.;
US D426,843 issued to Tanaka;
US D429,267 issued to Sumita et al.;
US D446,800 issued to Fukushima et al.;
US D469,793 issued to Onoda et al.;
US D491,967 issued to Kojima et al.; and
US D505,438 issued to Kojima et al.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD M. BEMBEN whose telephone number is (571)272-7634. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Ometz/
Supervisory Patent Examiner, Art
Unit 2622

RMB